SEPTIC DUMPER

GUEDE



Montana Department of Environmental Quality Solid Waste Section

October 2007

TABLE OF CONTENTS

PURPOSE	1
CHAPTER 1	
Who Needs A License And How To Apply	2
New License	2
Renewal License	2
Expired License/Late Fee	2
New Disposal Site	3
Disposal Records	3
Pumper List	3
Form - New License	4
Form - Renewal License	6
Form - New Disposal Site	10
Form - Operation and Maintenance Plan	16
Form - Vehicle Inspection	18
CHAPTER 2	
What Happens When DEQ Receives Your Application	20 21
CHAPTER 3	
Disposal Sites	22
Pumpings will not be applied	22
Pumpers will	23
Screening Requirement	26
Local Health Officer or Designated Representative	26
CHAPTER 4 – Waste Categories	27
Septage Waste	27
Car Wash Sumps and Other Sump Waste	27
Grease Trap Wastes	28
Privy Waste; Pit Toilet Waste; Portable Toilet Waste; Vessel Pumpout	
Facility Waste; and Recreational Vehicle Dump Station Waste	29
Grav water	29

CHAPTER 5 – Record Keeping Requirements	30
CHAPTER 6	
Inspections and Enforcement Action	32
License Denial or Revocation What Happens Now	32
CHAPTER 7 – Definitions	33
APPENDIX 1 – Sample Map	36
APPENDIX 2 – How to Raise the pH of Domestic Septage	38
APPENDIX 3 – Examples of Spreading Devices	41
APPENDIX 4 – Examples of Screening Devices	42
APPENDIX 5 – Examples of Injection Systems	43
APPENDIX 5 – Links	44

PURPOSE

The information in this guidance is provided to help the users and disposers of septage understand and follow the State and Federal rules for: licensing of cesspool, septic tank and privy cleaning businesses and to inform you of the requirements for the disposal of septage, grease trap waste, privy waste, car wash sump waste, and other similar wastes. These similar wastes include, but are not limited to, other primarily liquid wastes such as food processing wastes, septic tank pumpings that contain commercial and industrial wastewater, and snow melt sump wastewater, that can be applied to the land for a beneficial purpose. Wastes must be managed in a way that is protective of human health and the environment. To place waste on or into private or public property the pumper/disposer must have the permission of the landowner, facility operator, or the designated representative of the owner or operator.

Waste determined to be regulated hazardous wastes are not covered under the Solid Waste rules. Guidance on the management of hazardous wastes can be found in ARM Title 17, chapter 53 and can be reviewed on the MT DEQ web site.

(ARM 17.50.803)

1. WHO NEEDS A LICENSE AND HOW TO APPLY

Any person, who is in the business of cleaning cesspools, septic tanks, portable toilets, privies, grease traps, car wash sumps, or similar treatment works, or disposal of septage and other wastes from these devices, **can not** do business in the State of Montana without a current license from Montana Department of Environmental Quality (MT DEQ).

A license is only good for <u>one year</u>, running from January 1 through December 31. This requires the business to renew the license at the end of each year for the next year.

To obtain a license whether a new license or a license renewal, you must submit the appropriate application forms provided by MT DEQ and all fees to:

Montana Department of Environmental Quality Financial Services PO Box 200901 Helena MT 59620-0901

- **2. NEW LICENSE:** A new licensee will complete a "New License Form", a "New disposal Site Application form", a "Site Operation and Maintenance Plan", a "Vehicle Inspection Form and submit a \$300.00 license fee to MT DEQ. The \$300.00 license fee must accompany all applications in order to have them processed and a license issued. You may add new disposal sites with the approval of the County and MT DEQ anytime during the current license year with no additional fees.
- **3.** <u>LICENSE RENEWALS</u>: MT DEQ will mail to each current license holder an annual renewal form by November 15th of each calendar year. A \$300.00 license fee must accompany all applications in order to process and issue a license. You may add new disposal sites with the approval of the County and MT DEQ anytime during the current license year with no additional fees. You will need to complete and return the "License Fee Invoice Form", "License Renewal Form," and required fee. If adding a new site also complete and return the appropriate "New Disposal Site Form", and attachments.
- **4. EXPIRED LICENSE/LATE FEE:** If you did not do business and let your license lapse for a full year (December 31st) you will not be able to fill out the renewal form to obtain a license. You will be required to fill out a "New License Form" and submit the \$300.00 license fee. If a license is renewed after April 1st, a \$125.00 late fee will be assessed and your license will not be issued until the late fee is submitted.

Warning: By law if you have not renewed your license by December 31st or have not licensed your new business with MT DEQ you are not allowed to operate your business until you submit the fee and completed application and receive a current license. If you are found to be operating without a current license, enforcement action may be taken. This could include, but is not limited to, judicial action and the assessment of penalties.

- **5. NEW DISPOSAL SITE:** If you are adding a disposal site you must complete a "New Disposal Site Application Form." If this is a land application site you will need to complete a "Site Operation and Maintenance Plan Form", provide the appropriate map and diagram of the site. A "Vehicle Inspection Form" will be required if you have never land applied or it has been several years since you have land applied. You may add new disposal sites with the approval of the County and MT DEQ anytime during the current license year with no additional fees.
- **6. <u>DISPOSAL RECORDS</u>**: You must submit your pumping disposal records twice a year regardless of how you dispose of your pumpings. Your records must be submitted by July 15 of each year for the months of January 1 through June 30. You must submit the months of July 1 through December 31 with your annual renewal application. The Department may require your disposal records on a monthly basis if problems have been found. See Chapter 5 of this guide.
- **7. PUMPER LIST:** MT DEQ is required to send, by February 15th of each calendar year a current list of licensed pumpers to each county health officer or designated representative of those pumpers operating in that county who have renewed their licenses by January 31st. After February 15th, MT DEQ will notify the county health officer or designated representative of any new licenses or new disposal sites for each current licensee operating in their county(s). A list of currently licensed pumpers can also be found on the DEQ Septic Tank Pumper Program web page at the following link: http://deq.mt.gov/SolidWaste/pumpers.asp

NEW LICENSE FORM

Section 1 - **Application Information**

"Applicant" means the person to whom the license will be issued. This person is ultimately responsible for compliance with all the laws and rules of the State of Montana.

Applicant full legal name - This is the legal name of the applicant who proposes to establish the business to be licensed.

Name of Business/Organization - This is the name of the business/organization as filed or registered with the Montana Secretary of State office.

Business Federal Tax Identification Number - This is the tax number used for the business when filing federal taxes.

Physical Business Address - This is the physical location of the business, state and zip code. **Mailing Address** - This is where the applicant wishes to receive correspondence in relation to this application. Only fill in these blocks if the mailing and physical addresses are different. **County** - This is the county where the business is located.

Phone Number - The phone number and area code of the business.

Fax Number and E-Mail Address - If available provide these for the business.

Location of Business Records - This is the physical address of the records if other than the business address.

Section 1 APPLICANT INFORMATION (Please Print)						
Applicant full legal name: (ARM 17.50.803(1)(a)):		Name of Business/Organization as filed or registered with the Montana Secretary of State office (ARM 17.50.803(1)(a)):				
		Business Federal Tax ID Number:				
Physical Business Address:		City:		State:		Zip:
Mailing Address (if different from physical business address):		City:		State:		Zip:
County:	Phone Num	ber: Fax Number:			E-Mail:	
Location of Business Operation Records (if the location of operation records changes <u>during</u> the license year, you must provide notification in writing to DEQ):						

Section 2 - Counties Where Septage Will Be Collected

You must list all counties in which business is to be conducted.

Section 2 COUNTIES WHERE SEPTAGE W	ILL BE COLLECTED	

The signature certifies that you will conduct business in accordance to the laws and rules of the State of Montana. *If the form is not signed it will not be processed and a license will not be issued.*

APPLICANT CERTIFICATION/SIGNATURE							
In signing this application form, I certify that the above information is true and correct, and as the applicant named above, I shall conduct the business of cleaning septic tanks, cesspools, or privies and disposing of septage in accordance with the laws and rules of the State of Montana.							
PRINTED NAME:	Date:						
SIGNATURE:	-						
TITLE:	_						

You are also required to complete a "<u>New Disposal Site Application Form</u>" for each proposed disposal site, a "<u>Site Operation and Maintenance Plan Form</u>" for each site you plan to land apply, and a "<u>Vehicle Inspection Form</u>". These completed forms must be submitted with the License Application.

LICENSE RENEWAL FORM

Section 1 - **Application Information**

"Applicant" means the person to whom the license is to be issued. This person is ultimately responsible for compliance with all the laws and rules of the State of Montana.

Applicant full legal name - This is the legal name of the applicant who has established the business to be licensed.

Name of Business/Organization - This is the name of the business/organization as filed or registered with the Montana Secretary of State office.

DEQ License Number - This is the license number issue by MT DEQ.

Business Federal Tax Identification Number - This is the tax number used for the business when filing federal taxes.

Physical Business Address - This is the physical location of the business, state and zip code. **Mailing Address** - This is where the applicant wishes to receive correspondence in relation to this application. Only fill in these blocks if the mailing and physical addresses are different. **County** - This is the county where the business is located.

Phone Number - The phone number and area code of the business.

Fax Number and E-Mail Address - If available provide these for the business.

Location of Business Records - This is the physical address of the records if other than the business address.

Section 1 APPLICANT INFORMATION (Please Print) Applicant full legal name: (ARM 17.50.803(1)(a)):			Name of Business/Organization as filed or registered with the Montana Secretary of State Office (ARM 17.50.803(1)(a)):				
			Busine	ess Federal Tax ID N	lumber:		
Physical Business Address:		City:		State:		Zip:	
Mailing Address (If different from physical business address):		City:		State:		Zip:	
County:		Phone Number:		Fax Number:		E-Mai	<u> </u> :

Section 2 - Counties Where Septage Will Be Collected

You must list all counties in which business is to be conducted.

Section 2 COUNTIES WHERE SEPTAGE WIL	L BE COLLECTED	

Section 3 - DISPOSAL SITE/DISPOSAL METHOD/WASTE TYPE INFORMATION

If you have more than one disposal site, you will need to make a copy of the back page of the renewal form and fill out a new page for <u>each</u> disposal site, not exempted under 75-10- 1210(2), MCA. (The MCA states that if you pump septage from an owner/lessee you may dispose of their septage on their property as long as all state and federal rules are being met.)

Disposal Site Name/Site Owner Name - This is the name under which the site is known (Example: Fallen Ranch, Helena Waste Water Treatment Plant, etc.) and the full legal name of the property owner.

Site Legal Description - The location of the property by township, range, section and quarter section.

Site Physical Address - This will be the physical address of the site, if no physical address exists give complete directions to the site.

Method of Disposal - Check the box(s) indicating what the disposal site is; Wastewater Treatment Plant, Septage Processor or Composter, Licensed Class II Landfill, or Land Application Site. Check the box indicating yes or no whether the site was used for septage disposal during the previous year. If the Land Application Site box is checked you must include total acreage available for application and total proposed acreage to be used during the license year.

Waste Category - Check all boxes that apply; Septage, Portable Toilets/Vault Toilet, Grease Trap Waste, Sump Pumpings (Specify type: Automatic Car Wash Bay Sump, Attended Car Wash Bay Sump, Unattended Car Wash Bay Sump, or Other Sump.) You must also write in the volume of each type of pumpings applied at the site during the previous year and then the estimated volume of each type of waste projected to be disposed of at the site during the new license year.

Section 3 DISPOSAL SITE/DISPOSAL METHOD/WASTE TYPE INFORMATION (Complete separate Section 3 for EACH disposal site – Incomplete forms will be returned to the applicant) DISPOSAL SITE NAME/SITE OWNER NAME (full legal name or business name):						
DISPOSAL SITE NAME/SITE OWNER NA	ME (full legal name	or dusiness nan	ne):			
Site Legal Description (to nearest 1/4 Section: Township: Range: County:						
For Department Use ONLY – Lat/Long						
Site Physical Address or Directions to the	ne Site:					

Section 3 continued:

	od of Disposal:	Was this site used for septage disposal during the previous year?		Total acreage available for application:		Total acreage proposed for this year:	Number of acres used for disposal during the previous year:
	Wastewater Treatment	YES	NO				
	Facility						
	Septage Processor or Composter						
	Licensed Class II Landfill						
	Land Application Site						
Waste Category: (Check all that apply)					pun this	lume of npings applied at s site during the <u>vious y</u> ear:	Estimated total gallons during new license year:
	Septage						
	Portable toilet/Vault toilet type waste						
	Grease Trap Waste						
	Sump Pumpings (specify type below)						
	Automatic Car Wash Bay Sump						
	Attended Car Wash Bay Sump						
	Unattended Car Wash Bay	Sump					
	Other Sump (specify type)						

Section - Applicant Certification/Signature

The applicant must print his/her name and title to certify that the information is correct. The signature certifies that you will conduct business in accordance to the laws and rules of the State of Montana. *If the form is not signed it will not be processed and a license will not be issued.* Also, check box yes or no as to wanting your business name released for use on mailing lists.

APPLICANT CERTIFICATION - OWNER SIGNATURE (applicant signature required on EACH form)					
In signing this application form, I certify the above information is true and correct and, that as the cesspools, or privies and disposing of the pumpings in accordance with the laws and rules of the S					
PRINTED NAME:					
SIGNATURE:					
TITLE: DATE:	_				
The Department is periodically contacted by research organizations, sales personnel, and members Tank Pumpers. State law prohibits the Department from providing a mailing list to non-governme business name released for use on mailing lists? () YES () NO					

If you have a new disposal site you must also complete a "<u>New Disposal Site Application</u> <u>Form</u>" and "<u>Site Operation and Maintenance Plan Form</u>" for each proposed disposal site. The completed and signed forms must be submitted with the License Application.

NEW DISPOSAL SITE

The "New Disposal Site" form must be filled out by new licensees and by licensees renewing their license that has new disposal sites not used the previous year. A copy of the form must be filled out for **EACH new disposal site.** Example: If you have five new sites you will fill out five "New Disposal Site" forms.

Section 1 - **Application Information**

"Applicant" means the person to whom the license is to be issued. This person is ultimately responsible for compliance with all the laws and rules of the State of Montana.

Name of Applicant - This is the full legal name of the applicant who has established the business to be licensed.

Name of Business - This is the name of the business/organization as filed or registered with the Montana Secretary of State office.

DEQ License Number - This is the license number issue by MT DEQ or check new applicant. **New Applicant** - Check this box if you're a new applicant and do not have a DEQ license number.

Business Address - This is the physical location of the business, State and zip code.

Mailing Address - This is where the applicant wishes to receive correspondence in relation to this application. Only fill in these blocks if the mailing and physical addresses are different.

County - This is the county where the business is located.

Phone Number - The phone number and area code of the business.

Fax Number - If available the area code and fax number for the business.

Location of Business Records - This is the physical address of the records if other than the business address.

Section 1 APPLICANT INFORMATION (Please Print)							
Name of Applicant:	Name of	Business:			DE	Q License Number:	
						New Applicant	
Business Address:		City:		State:		Zip:	
Mailing Address:		City:		State:		Zip:	
County:	Phone N	umber:	Fax Number:				
Location of Business Operation Records:							

Section 2 - Disposal Site Information/Waste Category

Method of Disposal - Check the box indicating the disposal site and complete the corresponding section indicated.

Waste Category - Check the types of waste you will be pumping, and write in the estimated amounts of each waste you propose to pump during the license year.

Section DISPO	n 2 OSAL SITE INFORMATION (Complete as applicable – u	se one form for EACH site)
	od of Disposal: (Check all that apply)	,
	Land Application Site	Complete Sections 3 & 5 of the application
	Wastewater Treatment Facility	Complete Sections 4 & 5 of the application
	Septage Processor or Composter	Complete Sections 4 & 5 of the application
	Licensed Class II Landfill	Complete Sections 4 & 5 of the application
Wast	e Category: (Check all that apply)	Estimated total gallons during license year:
	Septage	
	Portable toilet/Vault toilet type waste	
	Grease Trap Waste	
	Sump Pumpings (specify type below)	
	Automatic Car Wash Bay Sump	
	Attended Car Wash Bay Sump	
	Unattended Car Wash Bay Sump	
	Other Sump (specify type)	

Section 3 - Land Application Site Information

Property Owner Full Legal Name - This is the legal name of the individual who owns the property where the pumping will be land applied.

Property Owner Business/Organization Name - This is the name under which the site is known or the name as registered with the Montana Secretary of State office. (Example: Fallen Ranch,etc.)

Property Owner Phone Number - The phone number and area code of the property owner of the land application site.

Property Owner Federal Tax Identification Number - This is the tax number used for the owner of the land application site.

Property Owner Mailing Address - This is where the land application site owner can receive correspondence in relation to this application.

Site Physical Address - This is the physical location of the land application site.

Direction to Site - This is the driving instruction to the land application site.

Site Legal Description -The location of the property by township, range, section and quarter section

Number of Acres available for land application - This is the total amount of acres available for land application at the site.

Type of Crop -This is the type of vegetation to be grown on the land application area (i.e., fallow land (wheat), pasture, range, forest).

Estimated Depth to Ground Water - This is the depth to ground water from the land surface. **Number of acres proposed for land application during license year** - This is the total number of acres that are proposed to be used for land application during the license year.

Crop Nitrogen Requirement - This is the nitrogen requirement pound per acre per year for the crop, grass, etc., at the land application site. Use Montana Extension Service Fertilizer Guidelines for Montana Crops or check with DEQ.

Source of Ground Water Information - This is where you obtain the information you provided on the depth to ground water. Information may be from local wells. Information available at Montana Bureau of Mines and Geology website (http://mbmggwic.mtech.edu/).

Soil Type - This is the general type of soil (clay, gravel, sandy loam, etc.) within the land application site.

Present use of adjacent Lands - This is the land that borders the land application site. What is it being used for?

Approximate Slope - This is the range of the slope of the terrain within the land application site. **Distance to nearest building** - This is the distance of any buildings to the land application site. **Distance to closet surface water** - This is the distance of the nearest pond, river, etc., to the land application site.

Is site Zoned - This is what type of zoning has been applied to the land if any. Commercial, etc. **Boxes** - Check the box(s) indicating yes or no to the questions. Is the site located outside the 100-year floodplain?; Is public access to the site restricted?; Is animal grazing on the site restricted?; Is crop harvesting from the site restricted?; Are public roads located further than 100-ft of the property boundary?; and, Are water wells located further than 100-ft of the property boundary?

Site Criteria - Check the box indicating yes or no whether the site meets the listed criteria, if not state why. Add any restrictions required by the local Health Department.

Land Application Operation and Maintenance Plan - A plan for each site must be written and included with the application covering each of the following areas: site access controls (is the area fenced, is there a gate, etc.); types and sources of wastes (septic tanks, portable toilets, etc.); vector attraction and pathogen reduction measures (injection, liming or tillage - which will be used); applicable animal grazing and crop harvesting restrictions; and list of equipment available for managing each type of waste (harrowing, plow with disk, screening device, etc.). MT DEQ will provide a copy of the Operation and Maintenance Plan to the local health officer designated representative in the county of the land application site. The "Land Application Operation and Maintenance Form" can be used.

Map - You must provide a map of the property. This can be a map or a sketch but it MUST INCLUDE the following: property lines and boundary lines of acreage available for land application, the acreage proposed for use during the license year; and all roads, homes, buildings, water wells, surface waters, canyons, ravines, and floodplains within 500 feet of the property boundary. (See Appendix 1)

Property Owner Signature/Certification - The property owner must print their name, date, and sign the form to certify that the pumper has their permission to use the site. The signature also states that you have provided the following information on the proper use of the site:

- the site or crops from the site may be restricted;
- the land application rate is limited by the rate at which septage may be land-applied,
- operational practices for pathogen and vector attraction reduction must be followed, and,
- the landowner is required to allow MT DEQ, local health officer, or designated representative to conduct inspections of the site.

Section 3 LAND APPLICATION SITE INFORMA	TION (C	Complet	e ALL of Sec	tion 3 f	or Land Aj	plicatio	on sites)
Property Owner Full Legal Name: (ARM 17.50.803(5)a))			Property Owner Business/Organization Name as filed or registered with the Montana Secretary of State office: (ARM 17.50.803(5)(a))				
Property Owner Phone Number:			Property Ov (Required if				
Property Owner Mailing Address:		City:			State	»:	Zip:
Site Physical Address:		City:			State	»:	Zip:
Directions to Site:					-		•
Legal Description of Site: (to nearest ½ section) /4	Section:	:	Township:	Rang	ge:	County	y:
Number of acres available for land application: Type of Crop							nated Depth to nd Water:
Number of acres proposed for land application during license year: Crop Nitroget per year lb			1 1			ce of Ground Water mation:	
Soil Type:	Present	use of a	adjacent lands: Approximate Slope:				pe:
Distance to nearest building: Distance to closest surface water: Is site zoned: (If yes, list Zone. Zoning/Planning Officer sign required for zoned areas)					ing Officer signature		
The site must be located outside the 100-year			RITERIA				
Pumpings must not be applied within 150-ft	of any sta	ate surfa					
Pumpings must not be applied within 100-ft					ghway or ro	ad.	
Pumpings must not be applied within 100-ft Pumpings must not be applied to lands with				rce.			
Pumpings being injected in to the soil must be				one gre	ater than 12	2%	
The site must be capable of handling the pro							rate (AAR).
Pumpings must not be applied to lands that a							
Public access to the site must be restricted.							
Crop harvesting must be restricted at the site							
Animal grazing must be restricted at the site			rithin 6 harres	of onnli	antion		
Litter will be controlled at the site. Litter moderate Local Health Department restrictions:	ust be tell	noveu v	Tunin 6-nours	от аррп	cation.		
-	with?			T No	Ifn	ot avnl	ain:
Have all site criteria been complied with? Yes No If not explain:							

PROVIDE THE FOLLOWING DOCUMENTS WITH THE APPLICATION
LAND APPLICATION OPERATION AND MAINTENANCE PLAN - An operation and maintenance plan MUST BE INCLUDED and provides provisions for EACH of the following items:
(a) Site access controls;(b) Types and sources of wastes;(c) Vector attraction, pathogen reduction measures;
(d) Applicable animal grazing and crop harvesting restrictions; and(e) List of equipment available for managing each type of waste.
MAP - A sketch or map MUST BE INCLUDED that provides the following:
 (a) Property lines and boundary lines of: (i) acreage available for land application, and (ii) the acreage proposed for use during the license year; and (b) All roads, homes, buildings, water wells, surface waters, canyons, ravines, and floodplains within 500 feet of the property boundary
PROPERTY OWNER SIGNATURE/CERTIFICATION
Representative of the Property Owner (<i>CIRCLE ONE</i>) of the proposed disposal location and the applicant has my permission use the site. By signing this form, I further certify that the applicant has provided me notification of the restrictions for createstand and animal grazing following the land application of septage on the property.
SIGNATURE:
DATE:

Section 4 - <u>Information for Disposal at Wastewater Treatment Plant, Septage Processor, Composter, or Class II Landfill</u>

If you plan to use more than one wastewater treatment plant, septage processor, composter, or Class II landfill disposal site, you will need to make a copy of this page of the form and fill out a new page for each disposal site that you use.

Facility Name - This is the legal name of the wastewater treatment plant (WWTP), processor, composter, or landfill.

Facility Contact - This is the Facility Manager of the WWTP, processor, composter, or landfill.

Phone Number - This is the phone number where the facility contact can be reached.

Facility Mailing Address/Location - This is where the facility contact can receive correspondence in relation to this application and the physical address of the disposal site.

Waste Treatment Plant Manager Signature - The Facility Manager must print their name and sign the form to certify that the pumper has their permission to use the site.

Section 4 INFORMATION FOR DISPOSAL AT: WASTEWATER TREATMENT FACILITY, SEPTAGE PROCESSOR, COMPOS	TER OR CLASS II LANDEILI
Facility Name:	ALM, ON CENSO II EIN DE ILE
Facility Contact:	Phone Number:
Facility Mailing Address/Location:	
WASTE TREATMENT FACILITY MA	ANAGER SIGNATURE
I,, hereby certify that I am the or Operator (CIRCLE ONE) of the proposed disposal location and the applicant has my	he Facility Operator, or Designated Representative of the Facility Owner permission to use the site.
SIGNATURE:DATE: _	
TITLE:	

Section 5 - Certification

Applicant Certification - This is the license applicants printed and signed name certifying that the information on the application is correct.

Health Officer Certification - This is the health officer's or designated representative (often the county sanitarian) printed and signed name certifying that the disposal site meets the physical requirements in accordance with the Montana State laws and rules governing septage disposal and any local health requirements.

Zoning Certification - This is the printed and signed name of the zoning representative certifying that the use of the site is in conformance with local zoning regulations. Not required if site is not zoned.

Section 5 CERTIFICATIONS	
APPLICANT CERTIFICATION	
I, have completed this application for a speci provided is true and correct to the best of my knowledge, and that I have made reasonable inquiries v	fic disposal site. I hereby declare that the information where necessary to confirm such information.
SIGNATURE OF APPLICANT:DATE:	
HEALTH OFFICER CERTIFICATION	,
I, am the Health Officer or Designate county. I certify that this disposal site meets the physical requirements of Montana laws and rules g requirements.	d Representative of the overning septage disposal, and any applicable local health
SIGNATURE:DATE:	
TITLE:	
ZONING CERTIFICATION (if required	0
I,, an official with knowledge of the zoning district couse of the site is in conformance with local zoning regulations.	overing the proposed disposal location, certify that the
SIGNATURE: DATE:	
TITLE:	

SEPTIC TANK, CESSPOOL, AND PRIVY CLEANER LAND APPLICATION – OPERATION AND MAINTENANCE PLAN

Company Name: - This is the name of the business as filled out on the renewal/new application form.

License Number - This is the septic pumper license number issued by the Montana Department of Environmental Quality.

Location of Disposal Records - This is the physical address where the disposal records are being stored.

Section - SITE INFORMATION

Land Application Site Name - This is the name under which the site is known or the name registered with the Montana Secretary of State office. (Example: Fallen Ranch,etc.) **Site Address** - This is the physical address of the property.

Direction to Site - This is the driving instruction to the land application site.

Legal Description of Site - This is the location of the property by township, range, section and quarter section.

Number of acres for land application - This is the total amount of acres available for land application at the site.

Type of Crop - This is the type of vegetation to be grown on the land application area (i.e., fallow land (wheat), pasture, range, forest).

Crop Nitrogen Requirement - This is the nitrogen requirement pound per acre per year for the crop, grass, etc., at the land application site. Use Montana Extension Service Fertilizer Guidelines for Montana Crops or check with DEQ.

SEPTIC TANK, CESSPOOL, AND PRIVY CLEANER LAND APPLICATION - OPERATION AND MAINTENANCE PLAN								
Company Name:			DEQ I	License Number:				
Location of Disposal Records:								
SITE INFORMATION								
Land Application Site Name:								
Site Address:	Site Address: City:							
Directions to Site:								
Legal Description of Site: (to nearest ¹ / ₄ section) /4	Section:	Township:	Range:	County:				
Number of acres for land application:	Type of Crop:		Crop Nitrogen per year <i>lbs</i>	Requirement: (pounds per acre s N/acre/yr)				

Section - WASTE INFORMATION

Waste Category - Check the types of waste you will be pumping and disposing at this site. Write in the estimate amounts of waste you propose to dispose at the site.

Section - SITE OPERATION AND MAINTENANCE

List Measures to Control Access to the Site - Is the area fenced, is there a gate, sign, etc. **List Vector Attraction and Pathogen Reduction Methods Used** - Injection, liming or tillage that will be used.

List Animal Grazing and Crop Harvesting Restrictions for the Site – e.g. Cattle will graze 30 days after application and/or wheat will not be harvested until 14 months after application. **List Equipment Available to Manage Each Type of Waste** - Harrowing, plow with disk, screening device, etc.

	WASTE INFORMATION							
Check	all that apply at this site:	Estimated total gallons during license year:						
	Septage							
	Portable toilet/Vault toilet type waste							
	Grease Trap Waste							
	Sump Pumpings (specify type below)							
	Automatic Car Wash Bay Sump							
	Attended Car Wash Bay Sump							
	Unattended Car Wash Bay Sump							
	Other Sump (specify type)							
SITE	OPERATION AND MAINTENANCE							
LIST	MEASURES TO CONTROL ACCESS TO THE S	ITE:						
LIST	VECTOR ATTRACTION AND PATHOGEN REI	DUCTION METHODS USED:						
LIST	ANIMAL GRAZING AND CROP HARVESTING	RESTRICTIONS FOR THE SITE:						
LIST	EQUIPMENT AVAILABLE TO MANAGE EACH	H TYPE OF WASTE:						

VEHICLE INSPECTION FORM

The "Vehicle Inspection" form must be completed by the County Health Officer or Designated Representative for all pumper vehicles. A form must be filled out for EACH vehicle. Keep a copy of the form with the vehicle.

Each vehicle used for surface application of septage must be equipped with a spreader bar, splash plate, or other dispersive mechanism approved by MT DEQ. If the business uses a screening device, or if MT DEQ has required the licensee or applicant to screen septage before applying it to land, the screening equipment or screening facility must be available for inspection.

Before you can place a new vehicle in service, you must have the vehicle inspected by the local health officer or their designated representative, either in person or, if the vehicle is readily identifiable in a photograph, by submission of a photograph. The form must be signed by the local health officer or their designated representative.

Only one certification per vehicle is required to be submitted to MT DEQ during the service life of a vehicle, screening equipment, or device.

To obtain the certification of screening equipment or a device that is at a fixed location, a licensee may either: request the local health officer or designated representative, or MT DEQ, to inspect it at the fixed location; or if the location or device is readily identifiable in a photograph, submit a photograph of the equipment or device to the local health officer or designated representative.

Section - Septic Tank Pumper Vehicle Inspection

Applicant full legal name - This is the legal name of the applicant who has established the business to be licensed.

DEQ License Number - This is the license number issued by MT DEQ. If new license, check new applicant.

New Applicant - Check the box if you're a new applicant and do not have a DEQ license number.

Name of Business - This is the name of the business as filed or registered with the Montana Secretary of State office.

Business Address - This is the physical location of the business, State and zip code.

Mailing Address - This is where the applicant wishes to receive correspondence in relation to this application. Only fill in these blocks if the mailing and physical addresses are different.

County - This is the county where the business is located.

Phone Number - The phone number and area code of the business.

Fax Number - If available provide the fax number for the business.

Boxes - The box(s) must be checked yes or no to the listed questions and explain where asked. Write in the vehicle Make, Model, and tank size.

Health Officer Certification - This is the health officers printed and signed name certifying that the vehicle is equipped with the proper spreading and screening equipment.

SEPT	IC TAN	K PUMPER VEHICL	E INSP.	ECTION					
Name of Applicant:						DEQ	DEQ License Number:		
Name of Business:							New Applicant		
Business Address:				City:		State:	Zip:		
Mailing Address:			City:		State:	Zip:			
Count	y:		Phone	Number:		Fax Numl	oer:		
YES	NO	(answer Yes or No	to the f	ollowing questions)					
		Does the vehicle sho	w signs	of leakage?					
		Is the vehicle equipp Specify:	Is the vehicle equipped with the proper spreading equipment?						
						-2			
		Is the spreading equipment mounted on the vehicle or separate? Specify:							
		If required to screen septage before land applying, is the vehicle, or site, equipped with the proper screening equipment (ARM 17.50.811(9)? Specify:							
		Is the spreading equipment approved for use?							
		Is the screening equipment approved for use?							
		of Vehicle:							
vehic to en	ele liste sure th	ed above is equipped	ed with coperly	the proper spread	ding and	l on the screening	ne health officer or above inspection, the g equipment necessary a manner protective of		
SIGN DAT	NATUR E:	RE:							
TITLI	E:								

1. WHAT HAPPENS AFTER MT DEQ RECEIVES YOUR APPLICATION?: (ARM 17.50.806)

Each submitted application for a new or renewed license will be reviewed by MT DEQ to ensure that it is complete. If additional information is required, MT DEQ will notify you in writing within 30 days after receiving the application and will postpone processing the application until the additional information is received and the application is complete. If MT DEQ does not receive the additional information within 90 days after requesting it, you will be required to start the application process again and resubmit your application using a "New Application Form" and provide all supporting documents.

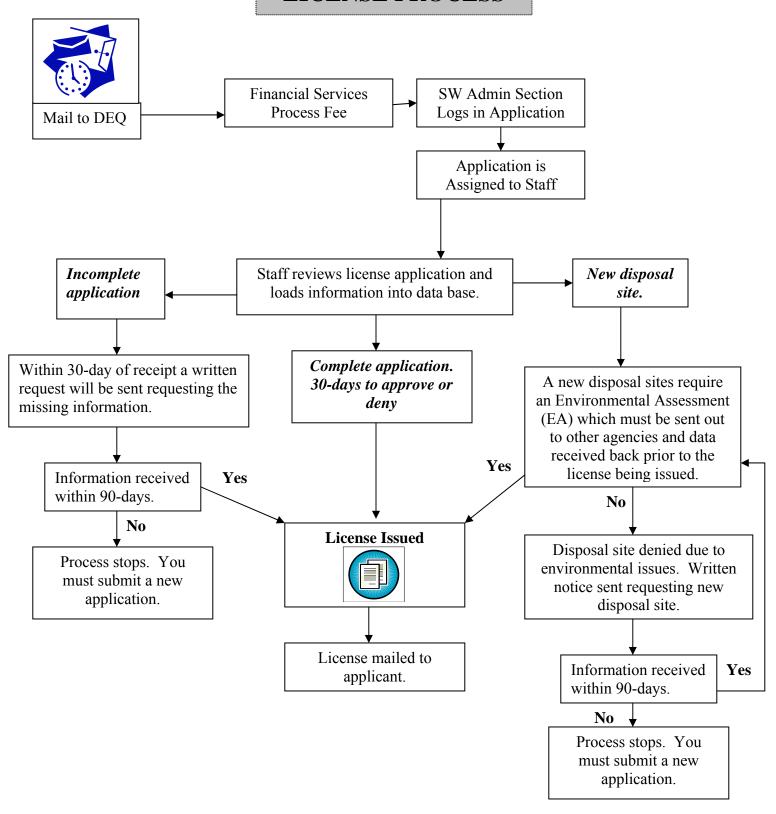
MT DEQ will review your completed application and relevant information and make a decision whether to issue, deny, or renew a license based on your ability to comply with the State and Federal requirements.

MT DEQ's decision to grant or renew a license may include such special conditions such as: considering protecting public health, protecting the environment, and avoiding public nuisances. If you have not obtained the certification of the local health officer, then within five days of receiving an application for license MT DEQ will notify the local health officer or designated representative of each county where you propose to do business. This gives the county the opportunity to review and comment on all applications in their county. MT DEQ may not issue a license until 14-days after notifying the local health officer or designated representative and has 30 days after the health officer decision to approve or deny the application to issue a license.

Normally the process is much faster than the maximum times listed above. Our goal is to promptly process all applications in order to keep from delaying business start-up. Please feel free to contact the Department prior to application submission if you have any questions.



LICENSE PROCESS



(ARM 17.50.809, ARM 17.50.810, and ARM 17.50.811)

1. DISPOSAL SITES:

A person is not allowed by law to dispose of septage or material derived from septage unless they have first applied in writing and obtained MT DEQ's and the Local Heath Department's written approval that the proposed disposal methods are protective of human health and the environment.

a. WASTEWATER TREATMENT SITE:

Septage may be placed at a permitted wastewater treatment plant only if the facility is designed and operated to handle septage in a manner protective of human health and the environment and is in compliance with the MT laws and rules.

b. SEPTAGE PROCESSOR OR COMPOSTER:

Septage may be placed at a licensed septage processor or licensed composting facility that is operated to handle septage in a manner that is protective of human health and the environment and is in compliance with the MT laws and rules.

c. LANDFILL:

Dewatered septage may be placed at a licensed Class II Landfill for disposal.

d. LAND APPLICATION SITE:

Land application is the spreading, spraying, injection, or incorporation of pumpings onto or below the surface of the land to take advantage of the soil enhancing qualities of the septage. Septage is land applied to improve the structure of the soil. It is also applied as a fertilizer to supply nutrients to crops and other vegetation grown in the soil. Certain management practices for land application of these pumpings must be followed.

Pumpings will not be applied:

- within 500 feet of any occupied or inhabitable building.
- within 150 feet of any state surface water, including ephemeral or intermittent drainages and wetlands. Greater distances may be required where slopes or other factors may increase the likelihood of runoff from the land application area. This increase will be determined by MT DEQ or local health officer and/or their designated representative.
- within 100 feet of any state, federal, county or city maintained highway or road. The 100 feet setback is measured from the edge of any right-of-way.
- within 100 feet of a drinking water supply source. Greater distances may be required where site conditions might increase the likelihood of contamination of a drinking water source. This increase will be determined by MT DEQ, the local health officer, and/or their designated representative.

- where ponding or runoff of septage is likely to occur. Remember to take into account topographical slopes on fields when selecting land application areas.
- on land with slopes greater than 6%.
- through subsurface injection on slopes greater than 12%.
- to land before you obtain written permission (MT DEQ Form) of the land owner or the land owner's designated representative. If land is leased from a tribe or governmental agency, permission of the tribe or agency must be obtained before pumpings may be applied to the land. If the pumpings are to be applied to land owned by the owner of the land on which they were generated, the pumper shall keep a permission slip or signed receipt. The Department may require the submittal of the permission slip or receipt.
- as bulk septage or other pumpings to agricultural land, forest land, pasture land, or range land at a rate greater than the agronomic rate of the site for nitrogen on an annual basis.
- as bulk septage at a reclamation site in excess of the agronomic rate unless the person first obtains site-specific approval from MT DEQ.
- to land where a threatened or endangered species or its designated critical habitat is likely to be adversely affected.
- to flooded, frozen, or snow covered ground if the pumpings may enter state waters.
- apply septage to public contact sites or home lawns or gardens.
- as bulk materials derived from septage, or materials derived from septage sold or given away in a bag or other containers to public contact sites or home lawns or gardens unless the pollutant concentrations are met in 40 CFR 503.13(b)(3), the Class A pathogen requirements in 40 CFR 503.3 1(a), and one of the vector attraction reduction requirements in 40 CFR 503.33(b)(1) through (b)(8).

Pumpers will:

- apply to the land surface only where at least six feet separate the land surface from seasonally high ground water. Greater separation distances may be required where soil types or specific application processes might increase the likelihood of ground water contamination. This increase will be determined by MT DEQ or local health officer and/or their designated representative.
- control litter at land application sites as necessary to prevent its spread to adjoining properties. Litter must be removed from a land application site within six hours after application.
- use the annual application rate (AAR) for **bulk septage**, in gallons/acre/year. The AAR is determined by using the formula AAR=N/0.0026, where N equals the amount of nitrogen, in pounds per acre per *365-day* period, needed by the crop or vegetation grown on the land. See the Montana Extension Services Bulletin or call DEQ.

AAR(gallons/acre/year) = <u>Pounds Nitrogen Required for Crop Yield</u>
0.0026

As an example, if 100 pounds of nitrogen per acre is required to grow a 40 bushel per acre crop of wheat, then the annual application rate of domestic septage is 38,500 gallons per acre.

$$AAR = 100 = 38,500 \text{ gallons/acre/year}$$

0.0026

The primary reason for this annual rate calculation is to prevent the over application of nitrogen in excess of crop needs and its potential movement through soil to groundwater.

• use the maximum annual application rate (AAR) for privy waste, **pit** toilet waste, **portable toilet waste, vessel pumpout facility waste or recreational vehicle waste,** in gallons/acre/year, as determined by the formula AAR=N/0.0052, where N equals the amount of nitrogen in pounds per acre per 365-day period needed by the crop or other vegetation grown on the land.

As an example, if 100 pounds of nitrogen per acre is required to grow a 40 bushel per acre crop of wheat, then the annual application rate of domestic septage is 19,230 gallons per acre.

$$AAR = 100 = 19,230 \text{ gallons/acre/year}$$

0.0052

The primary reason for this annual rate calculation is to prevent the over application of nitrogen in excess of crop needs and its potential movement through soil to groundwater.

- apply septage to land with a spreader bar, splash plate, or other dispersive mechanism approved by MT DEQ.
- land apply routine maintenance pumpings or emergency pumpings including, but not limited to, pumpings required due to septic system freeze-ups, overflows, flooding, or failures, to frozen or snow covered ground, **only** if no other reasonable treatment method is available. Reasonable treatment method options include hauling the waste to a waste water treatment plant or a septage storage, treatment, or dewatering facility that will accept the waste and that is within 25 miles of where you pumped.
- land apply pumpings to frozen or snow covered ground only if:
 - **◆** sites or fields used have a slope of less than or equal to 3%;
 - **♦** the land is not within a 100-year floodplain;
 - ◆ bulk septage, privy waste; pit toilet waste; portable toilet waste; vessel pumpout facility waste; and recreational vehicle dump station waste, have undergone treatment by the vector reduction technique of adding alkali material so that the pH is raised to and remains at 12 or higher for a period of at least 30 minutes; or
 - ◆ if not alkali stabilized, are incorporated into the soil as soon as the weather permits.

- grease trap waste is incorporated into the soil as soon as the weather permits.
- alkali stabilization of septage, privy waste; pit toilet waste; portable toilet waste; vessel pumpout facility waste; and recreational vehicle dump station waste, is required unless the owner or the owner's authorized representative is unwilling to accept pH-stabilized wastes. If this is the case then you are required to keep the signed written statement of objection to the alkali-stabilization from the owner or authorized representative on file. Site restrictions apply if not alkali-stabilized.
- apply septage with the following restrictions:
 - ◆ food crops with harvested parts that touch the septage/soil mixture and are totally above the land surface are not harvested for 14 months after application;
 - food crops with harvested parts below the surface of the land are not harvested for 20 months after application of material if the material remains on the land surface for four months or longer prior to incorporation into the soil;
 - food crops with harvested parts below the surface of the land are not harvested for 38 months after application of material if the material remains on the land surface for less than four months prior to incorporation into the soil; and
 - ◆ other food crops, feed crops, and fiber crops are not harvested for 30 days after application.
 - ◆ animals may not be permitted to graze on the land for 30 days after application
 of the material;
 - ◆ turf grown on the land may not be harvested for one year after application of the material if the harvested turf is to be placed on land with a high potential for public exposure or on a lawn, unless otherwise specifically authorized by MT DEQ;
 - public access to land with high potential for public exposure must be restricted for one year after application; and
 - ◆ public access to land with a low potential for public exposure must be restricted for 30 days after application.
- if mechanical dewatering of septage is required, perform the dewatering on the property where the waste is to be removed, at an approved land application site, at a licensed solid waste management system, or at a permitted waste water treatment plant.
- removed water from septage through a dewatering process is subject to septage disposal requirements. It may be:
 - ◆ land applied as required under the septage rules;
 - **◆** discharged to a licensed wastewater treatment plant;
 - ◀ discharged to an engineered commercial septic system; or
 - **♦** put back into the individual septic system it was removed from.
- apply dewatered solids to land as long as the rules are followed, or composted, or disposed in a licensed solid waste management system.
- land-apply gray water at approved sites without the need for vector or pathogen reduction only if it will not pollute state waters.
- comply with the water haulers laws/rules and use separate tanks with no common wall for pumpings and potable water if your truck is used to carry potable water and pumpings.
- handle all mixed loads of different types of pumpings appropriately and follow the applicable restrictions.

- control litter at the site: if determined by MT DEQ to be inadequate you may be required to screen the septage prior to land applications.
 - ◆ the screen will have a maximum opening width of three-quarters of an inch to remove non-putrescible waste. The non-putrescible wastes will be collected and disposed of at a licensed Class II Landfill.
 - screening is not required during the months of December, January, or February, but non-putrescible wastes must be removed from the land application site within one week after the snow melts.

NOTE: MT DEQ upon reviewing each license application will take into account proximity to population centers, volume of septage or other pumpings, soil types, protection of human health and the environment, and the avoidance of public nuisances and may place more or less restrictive criteria on septage treatment processes, individual land application, and disposal sites.

Screening Requirement:

If land applying and it is determined that litter control is inadequate the Department may require screening prior to land application of all pumpings. The screen must have a maximum opening width of three-quarters of an inch to remove the litter. All litter removed must be placed in a licensed Class II landfill for disposal. Screening is not required during the months of December, January, or February, but litter must be removed from the land application site within one week after the snow melts. See Appendix 4 for examples of screening devices.

Local health officer or their designated representative:

- Will certify that the proposed land application site meets all applicable state and local requirements.
- May reject sites for public health or public nuisance problems or for proximity to public water supplies, but in no case may a site be within 500 feet of an occupied or inhabitable building or within 100 feet of a drinking water source.
- May withdraw approval of previously approved sites if:
 - ◀ the site has not been properly managed for vectors or litter;
 - waste has been applied in excess of the agronomic rate or improperly applied;
 - ◆ the minimum separation distances as required in this rule are not being met; or
 - **◆** the site is in proximity to new public water supplies.
- Will approve or disapprove holding/storage tank request in accordance with local city/county requirements.
- Will inspect the pumper vehicle to include spreading and screening equipment.

(ARM 17.50.811, ARM 17.50.814, ARM 17.50.815, and ARM 17.50.816)

WASTE CATEGORIES:

SEPTIC TANKS

- Only a licensed pumper can remove and dispose of waste from a septic tank with the following exception:
 - ◆ an owner or lessee of the property where the septage is generated can pump the tank
 with their own equipment and dispose of the septage on their property. Disposal rules
 and restriction must be followed. (MCA 75-10-1210)
- Septage can be disposed by:
 - ◆ taking it to a permitted wastewater treatment plant that is designed and operated to handle septage,
 - **◆** taking it to a licensed septage processor or licensed composting facility,
 - ◆ dewatering the septage at an approved site, dewater material can be placed at a licensed Class II Landfill for disposal,
 - ◆ land application at an approved site. See Chapter 3 of this guide.
- Septage being pumped by a licensed pumper and land applied on the property of the tank owner will have a signed permission slip or signed receipt. All disposal rules and restrictions must be followed.

CAR WASH SUMPS AND OTHER SUMP WASTES

- Only a licensed pumper or the owner, operator or employee of the facility to be pumped can remove or dispose of waste from a car wash sump or other types of sumps.
- Sump waste from other than a car wash sump can not be pumped or disposed of unless you apply to and receive approval from MT DEQ.
 - ◀ MT DEQ will conduct a case-by-case evaluation, consider the source of the waste and the possible constituents when making its decision.
- Waste from an automatic car wash bay sump may be:
 - ◆ used as clean fill, or
 - ◀ if it has been dewatered, it can be used as cover at a licensed Class II landfill.

ATTENDED CAR WASH BAY SUMP PUMPING

- If chlorinated solvents are prohibited at the facility and the sump pumpings are free from visible oil and grease, they can be used as clean fill or, if dewatered, as daily or intermediate cover at a licensed Class II landfill.
 - ◆ You must have a written statement from the car wash owner stating that the material is solvent-free,
- If the pumpings contain visible oil or grease, they can be taken to a licensed landfarm or if dewatered, disposed of at a licensed Class II landfill with the operator's permission.
- If the use of chlorinated solvents are not prohibited at the facility, the sump pumpings must be handled in the same manner as an unattended car wash bay sump.

UNATTENDED CAR WASH BAY SUMP PUMPINGS

- The pumpings must:
 - ◆ be visually examined for oil and grease; and
 - ◆ tested for chlorinated solvents, or have a written statement from the owner stating that the sump pumpings are solvent-free.
- No visible oil or grease and free of chlorinated solvents (testing or written statement), may be:
 - ◆ used as clean fill or,
 - ◀ if dewatered, used as daily or intermediate cover at a licensed Class II landfill.
- Contains visible oil or grease, but are free of chlorinated solvents (testing or written statement), can be taken to:
 - **♦** a licensed landfarm or,
 - ◆ if dewatered, disposed of at a licensed Class II landfill with the landfill operator's permission.
- If owner cannot provide a statement of knowledge of the material, the pumpings must be tested for: volatile organic compounds (VOCs), screened for petroleum hydrocarbons, and tested for total chromium, lead, zinc, and cadmium.
 - ◆ If sump waste is removed from the sump prior to receiving the lab results, it must be stored in a manner to prevent contamination of the environment until the test results are received and the waste is disposed of. Examples of proper storage a lined pond, a holding tank, or a concrete bin.
 - ◀ If free of contaminants above regulated levels, the pumpings may be:
 - ♦ used as clean fill or,
 - if dewatered, as daily or intermediate cover at a licensed Class II landfill.
 - ◀ If contamination is above regulated levels, the operator must notify MT DEQ. MT DEQ will tell you what further testing is required and provide waste disposal options.
- All testing results must be maintained for five years by the pumper. They must be made available to MT DEQ upon request.
- Facilities receiving sump waste may require additional testing before accepting the waste.

<u>VOCs</u> - a test method capable of detecting and quantifying at least one part per billion VOCs in the waste. <u>Petroleum hydrocarbons</u> _ a test method capable of detecting at least one part per million hydrocarbons. <u>Total chromium, lead, zinc, and cadmium</u> _ a test method capable of detecting and quantifying at least one part per million of each element.

GREASE TRAP WASTES

- "Grease interceptor" and "grease trap" mean grease trap. Oil/water separators at commercial and industrial facilities are not grease traps. Oil/water separators may not be pumped unless the material is being processed by a used oil processor or at a licensed landfarm.
- The waste cannot be discharged at a wastewater treatment plant not specifically designed to manage the grease trap waste.
- The waste may be:
 - ◆ dewatered at a permitted wastewater treatment facility designed to accept the waste, or

- **◆** at a licensed landfill, or
- **◆** at an approved land application site.
- Dewatering of the grease trap waste can be conducted:
 - ◆ only by the licensed pumper, the owner of the property, or by the person leasing the property.
 - ◀ at the property it is pumped at only if the facility sits on five acres or more; and
 - ◀ if the dewatering does not constitute a nuisance or public health hazard and is not harmful to human health or the environment.
- The water from a grease trap dewatering process is commercial wastewater. It may be:
 - ◀ discharged to an individual commercial wastewater treatment system or approved wastewater treatment facility.
 - ◆ land-applied at an approved septage land application site.
- Dewatered grease trap waste may be disposed of at a Licensed Class II Landfill.
- Grease trap waste, dewatered or not, may be:
 - **◆** composted at a licensed compost facility;
 - ◀ treated at a rendering plant; or
 - ◆ land-applied at an approved septage land-application site by either injection into the soil or by tilling into the soil within 6 hours of application. Application frozen or snow cover ground would be the same as applying septage.
- Disposal of grease trap waste at facilities other than a licensed Class II landfill or at a permitted wastewater treatment plant must first be approved by MT DEQ. You must:
 - **◆** submit a written application for the proposed disposal method to MT DEQ;
 - ◆ receive written approval from MT DEQ prior to using the proposed disposal method.

PRIVY WASTE; PIT TOILET WASTE; PORTABLE TOILET WASTE; VESSEL PUMP OUT FACILITY WASTE; AND RECREATIONAL VEHICLE DUMP STATION WASTE

- Only a licensed pumper can remove or dispose of this type of waste.
- Privy waste, pit toilet waste, portable toilet waste, vessel pump out facility waste or recreational vehicle waste cannot be disposed of:
 - **♦** in a wastewater treatment system with a cesspool, or
 - at a wastewater treatment system with a septic tank, unless the septic tank and connected liquid treatment system was designed for this purpose by a licensed Montana professional engineer.
- The same conditions that were spelled out in Chapter 3 of this guide for septage must also be met when land-apply privy waste, pit toilet waste, portable toilet waste, vessel pump out facility waste or recreational vehicle waste.

GRAY WATER

- The Department requires that those businesses pumping and disposing of gray water in the State of Montana are to be licensed in the State of Montana.
- Gray water may be land-applied at an approved site without vector or pathogen reduction only if it will not pollute state waters.
- If gray water is pumped using a vehicle that also pumps septage, portable toilet waste, etc. the material would be considered a mixed load and must be handled and disposed of as septage waste.

(ARM 17.50.8 13)

RECORDING KEEPING REQUIREMENTS:

As a licensed pumper, you must maintain the records at your place of business indicated on the license application or other department-approved location. The records must be maintained for five (5) years and must contain the following information:

Land Application

- Type of material deposited at each disposal location;
- Location of each disposal site, by street address, latitude and longitude, or township, range, section and quarter section;
- Volume of each material deposited at each site, such as septage, grease trap wastes, sump pumpings, privy waste, pit toilet waste, portable toilet waste, vessel pumpout facility waste, and recreational vehicle dump station waste;
- Number of acres to which pumpings are applied;
- Date and time of each application;
- Nitrogen requirement for the crop or other vegetation grown on each site;
- Rate at which the different kinds of pumpings are deposited at each site in gallons per acre during a year;
- Vector attraction and pathogen reduction method used for each volume of pumpings applied;
- pH of the material 30 minutes after alkali addition, if that method is chosen for pathogen and vector attraction reduction.

NOTE: If the land owner objects to application of alkali-stabilized septage, a written statement from the land owner must be maintained with your records.

Wastewater Treatment Plant

- Type of material being deposed;
- Location of each disposal site, by street address, latitude and longitude, or township, range, section and quarter section;
- Volume of each material deposited at each site, such as septage, grease trap wastes, sump pumpings, privy waste, pit toilet waste, portable toilet waste, vessel pumpout facility waste, and recreational vehicle dump station waste;
- Date and time of each disposal;

The licensed pumper will submit a summary of these records to MT DEQ for the following time periods:

- January 1 through June 30. You must submit the documents by July 15;
- July 1 through December 31. You must submit the documents with your annual renewal form. If you submit your renewal in November submit those records up until that date. The remainder of the records can be submitted in January.

NOTE: Disposal records must be maintained for five years

You can use a form or document generated by your business or one of the forms provided by the Department as long as it contains the required information.

Waste Water Treatment Disposal Form	
BUSINESS NAME	
BUSINESS ADDRESS	
LIC. #	

Records Due: July 15th of license year AND with license renewal application

Disposal Date	Time of Disposal	Disposal Location (ADDRESS OR T-R-S)	TYPE OF MATERIAL (S - septic, G - grease, C - carwash, O - other specify)	Volume Disposed (gallons)

Land application Site Di	isposal Form
BUSINESS NAME	
BUSINESS ADDRESS	
LIC.#	

DATE	LAND APPLICA TION SITE (ADDRES S OR T- R-S)	TYPE OF MATERIA L (S - septic, G - grease, C - carwash , O - other specify)	VOLUM E (gall ons)	AREA OF APPLICA TION (ft² or acreage)	TIME OF APPLICA TION	NITROGEN REQUIREM ENT OF CROP ON SITE (lbs/acr e)	VAPR METHOD (T - tillag e, L - lime or I - inject ion)	PH IF SEPTA GE IS LIMED	TIM E TIL LED / LIT TER PIC KED

(ARM 17.50.812 and 17.50.820)

INSPECTIONS AND ENFORCEMENT:

MT DEQ and local health officers or local designated health representatives will conduct inspections of disposal facilities or proposed disposal facilities for septage and other wastes. Septic applicants, licensed pumpers and the property owners of the disposal site must allow the inspectors on the property to conduct inspections of these sites. Refusing to allow the disposal site to be inspected will cause license denial or revocation of site approval.

LICENSE DENIAL OR REVOCATION; APPEAL

MT DEQ can issue an order denying or revoking a Septic Pumpers license. If this occurs, MT DEQ will serve a written notice of an order of denial or revocation. This will be done by certified mail to the named individual on the septic pumper's application, license or the agent of the applicant or licensee.

The order denying or revoking the septic pumper's license will become final thirty days after the date it was mailed unless, during the thirty days, you request a contested case hearing before the Board of Environmental Review.

(ARM 17.50.802)

This section contains words and terminologies you will encounter while working in the septage business. The state definition of those words and terminologies are list below.

AGRICULTURAL LAND - is land on that a food crop, a feed crop, or a fiber crop is grown. It also includes range land and land used as pasture.

AGRONOMIC RATE - is the whole septage application rate (dry rate basis) designed to: (a) provide the amount of nitrogen needed by the food crop, feed crop, cover crop, or vegetation grown on the land; and (b) minimize the amount of nitrogen in the septage that passes below the root zone of the crop or vegetation grown on the land to the ground water.

APPLIED TO THE LAND SURFACE - is the uniform application of liquid or semi-liquid waste material at a rate closely approximating that which will result in maximum benefit to the crop or vegetative cover in the field, without ponding, runoff, or leaching.

ATTENDED CAR WASH BAY - is a place for washing trucks or automobiles that has an attendant on site while open to the public.

AUTOMATIC CAR WASH BAY - is a place for washing trucks or automobiles that has machinery designed to do the washing without allowing access to the bay during the process. **BULK SEPTAGE** - is septage that is not sold or given away in a bag or other container for application to the land.

CAR WASH SUMP - is an interceptor or settling device, designed to be emptied by mechanical means, located below the normal grade of a wastewater gravity system used to precipitate mud from wastewater at a car wash, garage, or vehicle maintenance facility before the water enters an oil/water interceptor, a sanitary sewer or individual wastewater treatment system. Oil/water interceptors are not car wash sumps.

CESSPOOL - is a seepage pit without a septic tank to pretreat the wastewater.

CONTROL OF PUBLIC ACCESS - is taking reasonable precautions to prevent exposure of humans to pathogenic materials. This does not mean that all entry must be stopped.

DEWATERED - is waste that passes the Paint Filter Liquids Test (Method 9095 in Manual SW-846, "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA (Update IIIA)).

FEED CROPS - are crops produced primarily for animals.

FIBER CROPS - means non-edible crops such as flax and cotton raised for fiber.

FOOD CROPS - are crops consumed by humans. A few examples are fruits, vegetables, grains and tobacco.

FOREST - is a tract of land with trees and underbrush.

GREASE INTERCEPTOR - means an interceptor of at least 750-gallon (2839 L) capacity that serves one or more fixtures and is remotely located from the fixtures.

GREASE TRAP - is a device designed to retain grease from one to four fixtures.

GREASE TRAP WASTE - is the water, solids, and semi-solid material removed from a grease trap or grease interceptor designed to remove cooking grease from home or restaurant wastewater in a sewer system. It does not include oil/water separator wastes at commercial or industrial facilities.

GRAY WATER - is any wastewater other than toilet wastes or industrial chemicals, and includes, but is not limited to, shower and bath wastewater, kitchen wastewater, and laundry

wastewater. It may not contain listed hazardous wastes thresholds.	s or hazardous substances above regulatory

HOLDING TANK - is a watertight receptacle that receives wastewater for retention and does not as part of its normal operation dispose of or treat wastewater.

INCORPORATED INTO THE SOIL - means the injection of waste beneath the surface of the soil or the mixing of waste with the surface soil by plow, disk harrow, spring harrow, tiller, or other department-approved method.

INTERCEPTOR - or "clarifier" is a device designed and installed so as to separate and retain deleterious, hazardous, or undesirable matter from normal wastes and permit discharge of normal sewage or liquid wastes into the disposal terminal by gravity.

LAND WITH A HIGH POTENTIAL FOR PUBLIC EXPOSURE - is land that the public uses frequently. This includes, but is not limited to, public contact sites and reclamation sites located in populated areas (e.g., a construction site located in a city).

LAND WITH A LOW POTENTIAL FOR PUBLIC EXPOSURE - is land that the public uses infrequently. This includes, but is not limited to, agricultural land, forest, and reclamation sites located in unpopulated areas (e.g., a strip mine located in a rural area).

PASTURE LAND - is land on which animals feed directly on feed crops such as legumes, grasses, grain stubble, or stover (fodder).

PATHOGEN -is a disease-causing organism. This includes, but is not limited to, certain bacteria, protozoa, viruses, and viable helminth ova.

PORTABLE TOILET - means a sealed pit privy designed to be readily transportable.

PRIVY - is a covered or uncovered facility for placement of non-water-carried toilet wastes where the wastes are discharged directly into a seepage pit without treatment in a septic tank or are discharged into a watertight vault.

PUBLIC CONTACT SITE - is land with a high potential for contact by the public. This includes, but is not limited to, public parks, cemeteries, plant nurseries, turf farms, and golf courses

PUMPINGS - is the materials, liquid and solid, removed from a cesspool, septic tank, privy, portable toilet, grease trap, or car wash (or similar) sump that may be land applied for a beneficial purpose. The term also includes other primarily liquid wastes that may be land applied for a beneficial purpose. These include, but are not limited to, wastes from food processing operations, septage that contains commercial and industrial wastewater, and wastes from snow melt wastewater sumps. The term does not include commercial or industrial wastes that contain listed hazardous wastes or hazardous substances above regulatory thresholds.

RANGE LAND - is open land with indigenous vegetation.

RECLAMATION SITE - means drastically disturbed land that is being reclaimed. This may include, but is not limited to, strip mines and construction sites.

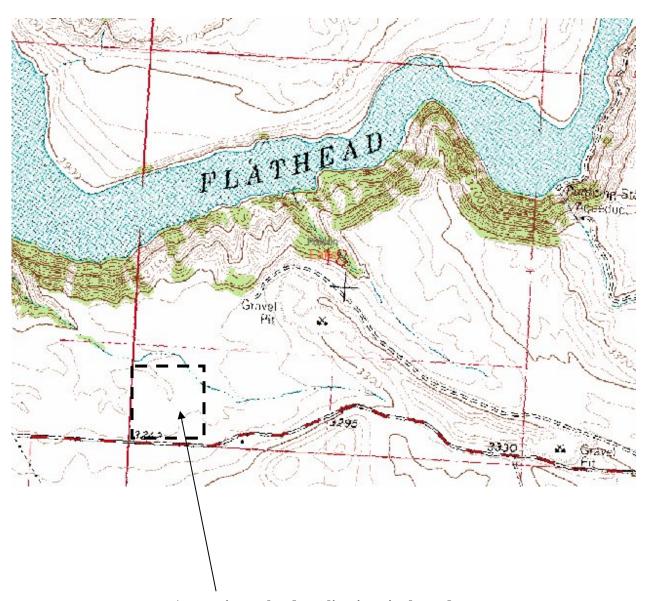
SEALED PIT PRIVY - is an enclosed receptacle designed to receive non-water-carried toilet wastes into a watertight vault.

SEPTIC TANK - is a watertight tank that receives and partially treats sewage through the process of sedimentation, oxidation, floatation, and bacterial action so as to separate solids from the liquid in the sewage, and then discharges the liquid to further treatment.

SEWAGE SLUDGE - is the solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in a treatment works. (a) Sewage sludge includes, but is not limited to: (i) domestic septage; (ii) scum or solids removed in primary, secondary, or advanced wastewater treatment processes; and (iii) material derived from sewage sludge. (b) Sewage sludge does not include ash generated during firing of sewage sludge in a sewage sludge incinerator or grit and screenings generated during preliminary treatment of domestic sewage in a treatment works.

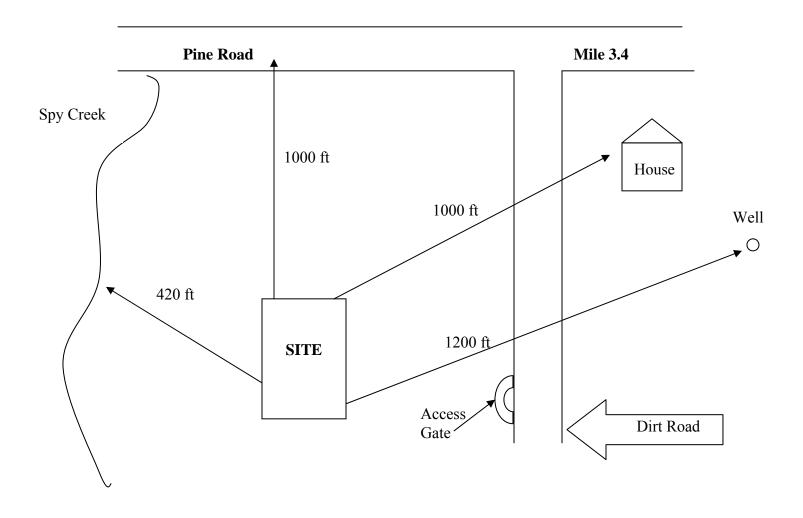
UNATTENDED CAR WASH BAY - is a place for washing cars or trucks that is not an automatic car wash bay and does not have supervision while open to the public. **VECTOR** - is any rodent, insect, or other organism, capable of transmitting disease to humans. **VECTOR ATTRACTION** - is the characteristic of sewage sludge and other pumpings that attracts rodents, flies, mosquitoes, or other organisms capable of transporting infectious agents. **VESSEL PUMPOUT FACILITY** - is a facility designed to receive wastes from marine sanitation devices, as defined in 23-2-522(3)(a), MCA.

Sample Maps



Approximate land application site boundary

Sample Maps



APPLICATION SITE – Pasture Land

Property Slopes 4% to the east

(SW/4 Section 18,T26,R22W)



USING LIME TO STABLIZE SEPTAGE

Stabilization is a treatment method designed to reduce levels of pathogenic organisms, lower the potential for putrefaction, and reduce odors.

Alkali-stabilization of domestic septage is an often over-looked method of vector attraction/pathogen reduction. Lime treatment controls the environment needed for the growth of pathogens. At pH levels greater than 12, the cell membranes of harmful pathogens are destroyed. The high pH also provides a vector attraction barrier, preventing flies and other insects from infecting the treated biological waste. Lime stabilization is a cost-effective option with lower capital costs than other treatment options. Other benefits include a reduction of hydrogen sulfide gas generation and a reduction in the leachability of metals in the septage.

Questions posed by licensed septic tank pumpers indicate a lack of understanding in terms of the techniques and materials required for effective stabilization. Domestic septage is easily treated by adding lime to the tank truck or through the suction hose.

What Kind Of Lime To Use

Hydrated lime, also know as calcium hydroxide, is an alkaline compound that can create pH levels as high as 12.4. Hydrated lime is produced by reacting quicklime with water in continuous hydrators. The end product is a fine, dry powder. Hydrated lime, as opposed to quicklime, is recommended for the alkali-stabilization of septage.

Quicklime, calcium oxide, is the product of calcining or heating limestone. Depending upon its use, quicklime can be used as pebble lime, or may be crushed or pulverized. Quicklime is reactive when mixed with water an exothermic reaction occurs that can increase the temperature of the biological waste to 70°C (158°F). This material should NEVER be added directly to a septic tank or pumper truck. It should only be added as a hydrated lime slurry.

Agricultural lime is produced to adjust the soil to a neutral pH of 7.0. Because of this, it does not have the strength or potency needed for lime stabilization of septage. *Do not substitute ground agricultural limestone for hydrated lime or quicklime*.

Both hydrated lime and quicklime are highly caustic, and care must be taken during use and storage. Lime is not hazardous or toxic, but it can be quite dusty and may be irritating to sensitive skin and the eyes. The operator should wear long sleeves, gloves, goggles, and a painter's mask or a respirator mask. Quicklime produces large amounts of heat when water is added to it.

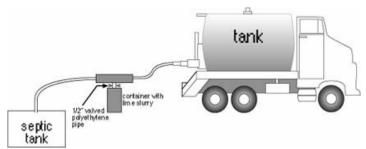
How To Mix Lime With The Septage

Based on the size of the septic tank, approximately 50lbs of hydrated lime per 1000 gallons of domestic sewage is needed. A slight excess of lime insures stabilization and costs very little for insurance. Excess lime will not raise the pH above 12.4 @ 25°C. To insure adequate mixing of the lime and the septage, the hydrated lime must be added to the liquid septage. This can be done in several ways:

Adding Lime During Pumping

The preferred method for adding lime is provided in the diagram below. In this process, a "T" fitting is placed in the suction hose close to the tanker inlet (see diagram). The leg of the "T" is fitted with a flexible valved hose for vacuuming lime. Adequate mixing should take place during pumping as the septage and lime meet in the "T" fitting. Lime can be vacuumed dry from a 50# bag, or if one prefers, a 55-gallon drum can be utilized to mix water and lime to produce a slurry.

A valve or cap on the lime hose is desirable so one can close this line after the lime is fed. When pumping a septic tank, the pump is started and the hose is submerged into the tank, as normal. As the septage is being evacuated, the flexible valved hose is inserted into a 50lb bag of hydrated lime or the barrel of the lime slurry. The lime is then vacuumed into the small hose, flowing to the large septage hose where it will be mixed and deposited in the tanker.



From: "Septage Management in Ohio", Bulletin 854, Part 1, The Ohio State University Extension

Adding Lime To The Pumper Truck

Dry hydrated lime should be added to the truck tank only after the truck is at least partially full. Lime/water slurries may be sucked onto the truck prior to leaving for the worksite, but some additional lime or slurry should be carried on the truck to make sure the pH is properly adjusted.

Adding Lime To The Septic Tank

The last way of mixing the hydrated lime with the septage is by adding it directly to the septic tank. The septic tank is first opened and 200 gallons or so is pumped. The hydrated lime is then dumped into the septic tank. The septage in the tank is then pumped into the tank truck where it automatically mixes the lime with the liquids and solids. However, the pumper must use care to insure that the liquid level of the septic tank is **below** the field line outlet prior to adding the lime so that the field lines are not contaminated with hydrated lime.

The major disadvantage of this method is that over time, the lime is so caustic that it can cause the baffles within the septic tank to fall off and deteriorate the tank, and, if this method is used repeatedly, a lime residue can build up in the tank that affects the pH, and impairs the efficiency of digestion in the tank. This method is not recommended by the Department.

pH Monitoring

Regardless of the alkali-stabilization method chosen, the pumper must ensure that the pH of the septage/lime mixture remains at a pH of 12 for a minimum of 30 minutes. As stated above, the high pH levels destroy the cell membranes of harmful pathogens. To be effective, the pH must be maintained for a minimum of 30 minutes to discourage the regrowth of these harmful pathogens.

THE pH OF THE DOMESTIC SEPTAGE MUST REMAIN AT 12 OR HIGHER FOR AT LEAST 30 MINUTES AFTER THE ALKALINE MATERIAL IS ADDED.

Sampling And Testing To Determine The pH Of Domestic Septage

You should not automatically assume that the lime or other alkaline material you have added and the method of mixing chosen will adequately increase the pH of the domestic septage. The pH must be tested. A representative sample should be taken from the body of the truckload or tank of domestic septage for testing.

For example, a sampling container could be attached to a rod or board and dipped into the septage through the hatch on top of the truck or tank or through a sampling port. Alternatively, a sample could be taken from the rear discharge valve at the bottom of the truck's tank.

However, if the lime has settled to the bottom of the tank and has not been properly mixed with the septage, the sample will not be representative.

Two separate samples should be taken 30 minutes apart, and both of the samples must test at pH 12 or greater. If the pH is not at 12 or greater for a full 30 minutes, additional lime can be added and mixed with the septage. However, after mixing in the additional lime, the septage must be at 12 or greater for a full 30 minutes in order to meet the pH requirements.

The pH of the domestic septage sample can be tested using either a pH meter or pH-sensitive colored paper.

CAUTION: Quicklime is more reactive than hydrated lime and it releases a lot of heat.

IF QUICKLIME IS USED, SAFETY PRECAUTIONS MUST BE TAKEN.

Quicklime can cause bad burns if it gets onto moist skin or into your eyes. Appropriate safety precautions include the use of rubberized gloves, a respirator to exclude dust, and protective eyewear and clothing to keep moist skin from contacting the quicklime. In addition, a fire could start if a bag of quicklime gets wet and sits around. Any fire involving quicklime must be put out using a carbon dioxide [CO2] extinguisher, not water. Water sprayed onto such a fire would only react with the quicklime and release more heat.

Safety Items Needed

- 1. Wear long sleeves
- 2. Gloves
- 3. Safety Goggles
- 4. A painter's mask or a respirator mask.
- 5. Carbon dioxide fire extinguisher
- 6. Check the manufacture requirements for the product being used.

Reporting Requirements

Document the pH level taken for each load being disposed at your land application site on the appropriate disposal form.

For additional questions about lime stabilization, contact the Montana Department of Environmental Quality, Solid Waste Regulatory Program at (406)444-5300.

Examples of Spreading Devices













Examples of Screening Devices











Examples of Injection Systems



Web Link

The link to the Montana DEQ – Septic Tank Pumper Information Site is: http://www.deq.mt.gov/SolidWaste/pumpers.asp

The site has the following forms available for you to download:

Application Form
Renewal Application Form
New Disposal Site Application Form
Operation and Maintenance Outline Form
Vehicle Inspection Form
Disposal Site Permission Slip Form
Disposal Record Forms

